Before the
FEDERAL COMMUNICATIONS COMMISSION
Washington, D.C. 20554

In the Matter of	)	
IP-Enabled Services	)	WC Docket No. 04-36

COMMENTS OF NENA

The National Emergency Number Association ("NENA") responds to the Commission's Notice of Proposed Rulemaking in the captioned proceeding.[1] NENA's sole mission is the extension and improvement of emergency (9-1-1) calling.

We have been particularly concerned to develop a consensual "future path" by which new technologies, services and devices capable of dialing or signaling 9-1-1 can provide their users with access to emergency assistance.[2] As discussed further below, we need to integrate 9-1-1 capability – where feasible and expected by consumers – into these new services and devices by thoughtful advance planning rather than as an afterthought.

A first step along that future path for providers and users of IP-enabled services is the agreement reached in December 2003 between NENA, VON Coalition and a dozen companies that provide voice services using internet protocol ("VOIP").[3] The agreement contemplated both

[1] FCC 04-28, released March 10, 2004, 69 Fed. Reg. 16193, March 29, 2004 ("Notice").

[2] http://www.nena.org/9-1-1TechStandards/future_path_plan.htm. *See also*, http://www.nena.org/9-1-1TechStandards/voip.htm.

[3] http://www.fcc.gov/voip/materials-view.html.

interim and longer-term solutions to the problems of identifying and locating VOIP callers to 9-1-1.

The agreement reflects NENA's current view that industry and public safety cooperative consensus is the best initial means of determining how E9-1-1 regulatory requirements should be identified. The current efforts of NENA's technical committees, having both public safety and industry members, are discussed further below.

It is appropriate that the search for consensus take place. This FCC proceeding and other forums at the agency are important contributors to the discussion.[4] Any agreements reached must be founded on the ultimate authority of the Commission to assure access to 9-1-1 services. If that authority is lacking under present law, Congress could be asked to fill the gap.

NENA believes the FCC is correctly confident in its authority "to determine whether the public interest require[s] that a provider of a particular service should be required to provide 911/E911 to its customers." (Notice, ¶53, n.162) The amplitude of that authority makes it unnecessary, we suggest, to strain at fitting IP-based services into existing regulatory classifications such as Title II common carriage.[5]

Instead, the *a priori* importance of "promoting the safety of life and property," 47 U.S.C.§151, causes us to recast the risk-benefit analysis expressed in the Notice. We respectfully suggest that the question should not be: "How should we weigh the potential public benefits of requiring emergency calling and other public safety capabilities against the risk that regulation could slow technical and market development." (Notice, ¶53) Instead we would ask:

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[4] For example, the work of the advisory committee, NRIC VII, http://www.nric.org.

[5] Of course, state regulatory commissions and the courts must apply the law of their jurisdictions as they see fit. If their judgments conflict with those of the FCC, Congress may need to address the issues.

> Given the obvious importance of emergency calling, how can we encourage (or require, if need be) 9-1-1 access as an essential ingredient of early planning for "technical and market development" of new communications or information services and products?

It is not by accident, we submit, that the Notice combines the discussion of public safety and disability access. Both are activities traditionally neglected in development of new services and products. A long-time advocate for improving communications access for persons with disabilities, Gregg Vanderheiden, had this to say at a recent FCC-sponsored forum:

> [T]here are no market forces to ensure that general access will be provided or that the needs of people with most types and degrees of disabilities will be addressed when their needs differ from mass-market needs.
>
> VOIP discussions already show that the aspects of VOIP that are getting serious discussion are those where there are regulations and those where there is enforcement (or threat of enforcement).[6]

When NENA asks, as above, that 9-1-1 access be the result of early planning for technical and market development of new services and products, it has in mind the strong analogy in the Commission's rules implementing Section 255 of the Communications Act, where manufacturers and service providers are advised:

> Sec. 6.7 Product design, development, and evaluation.
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> (a) Manufacturers and service providers shall evaluate the accessibility, usability, and compatibility of equipment and services covered by this part and shall incorporate such evaluation throughout product design, development, and fabrication, as early and consistently as possible. (emphasis added)

We understand the different legal footing on which this requirement rests – the Congressional adoption of Section 255 – and we are not asking, at this time, for a comparable regulatory

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[6] VOIP Forum, December 1, 2003, http://www.fcc.gov/voip/voipforum.html.

mandate to plan early for 9-1-1 access, so long as sufficient progress can be achieved voluntarily. We repeat, however, our belief that the amplitude of the FCC's authority is sufficient to create a regulatory safety net if required.

We remain hopeful but realistic about voluntary behavior in a competitive marketplace. Commercial concentration on proliferation of services and applications for profit may well minimize attention to full E9-1-1 solutions as part of those applications. Historically, this has been the case. E9-1-1 support frequently has been an afterthought. It would seem imprudent to assume that this round of VOIP technology application development should automatically be different. Rather, we must consciously and deliberately apply forethought. NENA prefers a voluntary and collaborative approach with the industry. However, we consider it likely that carefully defined, minimal regulatory specifications will be desirable in order to see that the needs of E9-1-1 are met steadfastly and reliably across the predictable proliferation of services and applications.

In ¶¶17-22 of the Notice, most of the examples listed may well involve the need to allow 9-1-1 calling or messaging, which suggests that the design of near-term and future devices and software must take 9-1-1 into account. If this becomes increasingly simple to achieve, it will lessen the tendency for developers and marketers to overlook 9-1-1 needs in their zeal to get to market in the increasingly competitive environment postulated in these paragraphs. However, it also means that some direction and monitoring functions are needed to see that this happens on a consistent and "best-efforts" basis across the myriad of opportunities. This direction is best set before the fact, rather than reactively. Directive influence is the key, and the FCC is best positioned to coordinate the process of industry and public safety collaboration.

As a policy matter, we believe that any domestic service provider originating 9-1-1 traffic should be subject to 9-1-1 requirements and obligations, including financial support, irrespective of the source of the call. We maintain that the responsibility of using and properly supporting 9-1-1 as an originating service to customers should apply equitably among providers that use it in similar ways.

These principles have consequences for the classes of "functional and economic factors" discussed at ¶¶36-37 of the Notice. Concerning "equivalence to traditional telephony," is the assumed user expectation enough to ignore the potential need for emergency messaging from a given application? Even if the device in use doesn't have an apparent telephone function, does this guarantee that the user will not expect to be able to use it for access to emergency communication and response? Certainly a personal digital assistant ("PDA") or two-way pager doesn't always look or act like a telephone, but the user might reasonably assume emergency messaging capability. Could a gaming device – with or without a voice function -- use an IM function and a unique code (which may not be 9-1-1 per se) to create a rational expectation of emergency communication access?

Apparent or actual functional equivalence to traditional telephony may not determine intended uses in the future, especially as traditional assumptions fade from the consciousness of future users. Again, NENA believes that if a device or service could be used for communication of emergencies, it should be required to support 9-1-1 and its equivalents as 9-1-1 evolves to accept that support. The future is happening now.

There are differing needs to support 9-1-1, based on various dimensions of the originating service types:

- fixed caller/messager location

- nomadic (changing location periodically)
- mobile (moving relatively constantly)[7]

Most often, the end application providers would be expected to meet 9-1-1 needs. The ISP providers may have little or no involvement. However, the VOIP service provider may need to gain information on caller location from the broadband provider, since that provider has knowledge of the terminating address/location of the broadband user.

This might be particularly true for nomadic users, as the VOI provider may not query (or be able to query) the actual user for current location. But the broadband provider already has that location information, since the broadband connection is fixed in its terminus. Thus, the broadband provider may need to support E9-1-1 service in this fashion, even though the broadband transmission supplier may have little to do with the actual provision of VOI service.

NENA seeks reasonable but specific requirements for 9-1-1 service across all types of IP-based originating services that can generate emergency messaging. In that context, classifications may be less important to our needs than a specific objective of consistent capabilities across all varieties of service that can generate 9-1-1 calls and data.

We are conscious of economic issues in the challenge of 9-1-1 solutions for IP-based services. They fall upon PSAPs as well as device and service providers. We believe: (1) the challenges are worth assuming; (2) they should fall equally on similarly situated competitors; and (3) they will be easier to meet if planned and budgeted early in the product or service development cycle. The challenges, we maintain, simply cannot and must not be ignored or

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[7] Nomadic and mobile users of the internet are not inhibited by the borders of nations that may have vastly different emergency calling/messaging systems. We reserve for later discussion the aim of international 9-1-1 access or its equivalent.

postponed when the competitive objective is to replace telecommunications services that already are providing E9-1-1 access, services and network components.

NENA Technical Committee Efforts

Following the NENA-sponsored IP forum in Atlanta last August, we began to work with members of the Internet Engineering Task Force on necessary technical definitions. A NENA VOIP/Packet Technical Committee was created, along with subsidiary working groups. Baseline "migratory" ("I2") solution requirements have been identified and NENA internal technical and operational reviews are scheduled for completion May 30, 2004. Refining of these migratory requirements will continue, and their release is expected at the end of this year. Specification of long-term, end-to-end IP E9-1-1 plans is targeted for early 2005.

The migratory solution is a way of utilizing current E9-1-1 architecture by applying designed interfaces from the VOI and VOIP call originators to the front end connections into the E9-1-1 systems. This approach has certain limitations, just as in wireless E9-1-1. These I2 methods would last, presumably, until implementation of I3. The I3 solution, or long-term approach, is designed to utilize IP as the end-to-end basis of a next-generation E9-1-1 system.

Scope" Criteria

At ¶55 of the Notice, the first criterion assumes interconnection with the public switched telephone network. ("PSTN") However, there are and will be IP-based originating services that – in the making of an emergency call -- would not be switched, would never touch the PSTN, and would still require E9-1-1 capabilities.[8] For instance, if a Voice over Internet provider uses a

[8] Conversely, IP-enabled 9-1-1 services can be entirely independent of the internet. IP-enabled "VOIP enterprise" applications, such as PBX replacements, use IP protocol and software processes, but interface for E9-1-1 purposes to PSTN end offices and enter the current E9-1-1 systems.

media router connection from the internet through a firewall to a dedicated state-level private IP network that connects to PSAPs, the PSTN is never involved. The criterion could be revised to read "two-way voice service, interconnected with the public switched network or another IP network."

Funding

The changes predictable (and unpredictable) in the evolution of IP-enabled services will not come free. Public safety authorities cannot be left for long in the position of reliance on conventional service surcharges that may actually shrink as consumers give up those services. Nor can the federal government be viewed as the sole answer to these financial requirements. Although we support the need for national direction from the FCC, just as we support – in pending legislation – cabinet-level attention to 9-1-1 issues, state and local governments may still require the authority to consider, and should not be preempted from considering, equitable distribution of financial obligations among communication and information service providers offering 9-1-1 capability.

CONCLUSION

NENA technical committees composed of industry and public safety members have begun working toward fulfillment of the hopes embodied in a December agreement on VOIP E9-1-1 implementation. In line with the discussion above, NENA asks that the FCC act within its lawful authority to encourage (or require, if need be) feasible 9-1-1 access as an essential

ingredient of early planning for "technical and market development" of new communications or information services and products capable of emergency calling.

Respectfully submitted,

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